REMARKS

Reconsideration and allowance are respectfully requested.

Claims 1-4 and 6-12 are pending. The amendments are fully supported by the original disclosure and, thus, no new matter is added by their entry. Claims 1-2 are amended to conform to the scope of Group I as required by the Examiner. The term "tumors" in claim 1 is replaced by the specific tumors described on page 5, lines 17-18, of the specification. The antitumor agents originally listed in claim 6 are separately recited in claims 6 and 9-10 for clarity. Claim 5 is canceled without prejudice or disclaimer because it is redundant in view of incorporating its limitation in claim 1. Other informalities are corrected that do not change the scope of the claims.

Withdrawal of the objections to claims 1-8 on page 11 of the Office Action is requested because the Examiner's suggestions are adopted herein.

35 U.S.C. 112 – Enablement

The Patent Office has the initial burden to question the enablement provided for the claimed invention. M.P.E.P. § 2164.04, and the cases cited therein. It is incumbent upon the Patent Office, whenever a rejection on this basis is made, to explain why it doubts the truth or accuracy of any statement in a supporting disclosure and to back up assertions of its own with acceptable evidence or reasoning which is inconsistent with the contested statement. *In re Marzocchi*, 169 USPQ 367, 370 (C.C.P.A. 1971). Specific technical reasons are always required. See M.P.E.P. § 2164.04.

Claims 1-8 were rejected under Section 112, first paragraph, because it was alleged that the specification "does not reasonably provide enablement for methods of use treating any tumors without limitation, nor does limitation of the instant preparation without limitation of 'peptides' or 'agents modifying the biological response'." Applicants traverse because the Examiner admits on page 3 of the Office Action that the treatment of hepatocarcinoma or leukemia is enabled and the presently claimed methods of treatment specify treatment of those specific tumors. In addition, there is no reason given why treatment of lymphoma, carcinoma, sarcoma, breast cancer, lung cancer, head and neck cancer, rectal cancer, or bladder cancer would require undue experimentation.

Present claim 10 is directed to a combination of the claimed compound and an antitumor agent, which is a peptide. The Examiner objects that no specific compound is named in Applicants' specification that is a peptide. This is not a proper ground for objection. A specification need not teach, and preferably omits, what is well known in the art. See *Hybritech v. Monoclonal Antibodies*, 231 USPQ 81, 94 (Fed. Cir. 1986). Here, specific "named compounds" are known to persons skilled in the art.

For example, U.S. Patent Nos. 5,235,038; 5,830,996; 7,173,110; and 7,524,811 disclose peptides that are antitumor agents. See attached. Further, GnRH agonists such as leuprolide, are antitumor agents used in the treatment of hormone-responsive tumors such as prostate cancer or breast cancer (e.g., Lupron®, Viadur® and Eligard® that are all FDA-approved antitumor agents). See attached U.S. Patent No. 4,897,256. Such knowledge of the prior art would have been in the possession of persons skilled in the art. Therefore, such examples support enablement of peptides because what is well known in the art does not have to be taught in Applicants' specification to enable their claimed invention. Id.

Withdrawal of the enablement rejection made under Section 112, first paragraph, is requested because it would not require undue experimentation for a person of skill in the art to make and use the claimed invention.

35 U.S.C. 103 – Nonobviousness

A claimed invention is unpatentable if the differences between it and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art. *In re Kahn*, 78 USPQ2d 1329, 1334 (Fed. Cir. 2006) citing *Graham v. John Deere*, 148 USPQ 459 (1966). The *Graham* analysis needs to be made explicitly. *KSR v. Teleflex*, 82 USPQ2d 1385, 1396 (2007). It requires findings of fact and a rational basis for combining the prior art disclosures to produce the claimed invention. See id. ("Often, it will be necessary for a court to look to interrelated teachings of multiple patents . . . and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by

the patent at issue"). The use of hindsight reasoning is impermissible. See id. at 1397 ("A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning"). Thus, a prima facie case under Section 103(a) requires "some rationale, articulation, or reasoned basis to explain why the conclusion of obviousness is correct." *Kahn* at 1335; see *KSR* at 1396. An inquiry is required as to "whether the improvement is more than the predictable use of prior art elements according to their established functions." Id. at 1396. But a claim that is directed to a combination of prior art elements "is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." Id. Finally, a determination of prima facie obviousness requires a reasonable expectation of success. See *In re Rinehart*, 189 USPQ 143, 148 (C.C.P.A. 1976).

Claims 1-8 were rejected under Section 103(a) as allegedly unpatentable over Glannessi et al. (U.S. Patent 6,444,701) in view of Zhou et al. (Cancer Res. 63:7330-7337, 2003). Applicants traverse because Zhou teaches away from the invention claimed herein.

Zhou discloses that agents able to stimulate carnitine palmitoyltransferase (CPT) can have antitumor activity, which is inapposite to Applicants' claimed invention that teaches inhibitors of CPT may be used to treat tumors. Specifically, Zhou states that "C75 directly stimulates CPT-1" (abstract) and "C75 stimulated CPT-1 activity in a variety of cell lines including MCF-7 cells" (page 7336, left column). The compound C273, which is said to be "structurally similar to C75 except for the single reduction of the exocyclic double bond group" (page 7333, left column), is likewise expected to stimulate CPT-1 activity.

One of ordinary skill in the art would not have modified Zhou's compound, which stimulates CPT-1 enzyme activity, to produce an antitumor agent because Applicants teach that compounds inhibiting CPT-1 activity have "remarkable antiproliferative and tumoricidal effects" (page 5, lines 6-7, of the specification). This result was completely unexpected and surprising. Further, their ability to inhibit CPT-1 activity can be separated from their antiproliferative and tumoricidal activities: i.e., CPT-1 inhibition is not required for antitumor activity. Zhou's disclosure that stimulating CPT-1 activity is corre-

lated with antitumor effect teaches away from Applicants' invention. In fact, compounds of the claimed invention have antitumor activity irrespective of their ability to stimulate or to inhibit carnitine palmitoyltransferase!

Withdrawal of the Section 103 rejection is requested because the claims would not have been obvious to one of ordinary skill in the art when this invention was made.

Conclusion

Having fully responded to the pending Office Action, Applicants submit that the claims are in condition for allowance and earnestly solicit an early Notice to that effect. The Examiner is invited to contact the undersigned if additional information is required.

Respectfully submitted,

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